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**COMPARISON OF ACB AND ASVAB CLERICAL TESTS  
FOR USE IN THE ARMY QUALIFICATION BATTERY**

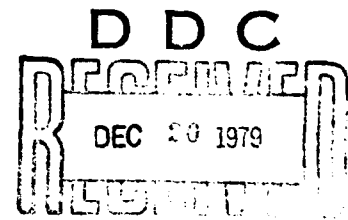
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FOR USE IN THE ARMY QUALIFICATION BATTERY.

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## COMPARISON OF ACB AND ASVAB CLERICAL TESTS FOR USE IN THE ARMY QUALIFICATION BATTERY

↘ The current Army Qualification Battery (AQB) uses a clerical test similar to that of the Army Classification Battery (ACB). It would be desirable to substitute a clerical test that is simpler to administer and score than the operational ACB Army Clerical Speed Test (ACS) and at the same time equivalent in validity. One possible substitute is the Coding Speed Test (CS) of the Armed Services Vocational Aptitude Battery which was designed to be equivalent to ACS Part II, Coding.

Concern with ease of administration and scoring of the ACS stems from the fact that it is administered at Armed Forces Entrance and Examining Stations (AFEES) to individuals in mental category IV (AFQT percentile scores 10-30) and to men applying for enlisted commitments. Because the time available for processing at the AFEES is limited, any improvement to facilitate test administration and scoring is especially valuable. ↙

The Army Clerical Speed Test has items of two types: Number Reversal, Part I, and Coding, Part II. The time limit for each part is 2.5 minutes. The instruction and answer sheets for ACS form a three-page self-contained unit. The three pages are attached. The center sheet, printed on both sides, contains the test items and answer spaces for the two parts. The outer sheets contain the instructions and practice items for the two parts. Part I of the test has 60 items and Part II has 50 items. Before ACS can be scored, the outer sheets must be separated from the center sheet. Each of the answer sheets must be scored separately. Examples of the practice items for ACS Parts I and II and for CS are shown in Table 1.

Items in the Coding Speed Test are similar in type to those of ACS Part II. There is a separate answer sheet and a separate booklet. However, CS has 100 five-choice items compared to 50 ten-choice items in ACS Part II. CS also requires the examinee to find the answer among selected alternatives rather than from the total key. Total testing and administration is approximately the same for ACS and CS, since CS has items of only one type--with a saving in instructions and practice time--but CS has a slightly longer test time limit--7.0 minutes in comparison with 5.0 for ACS.

### METHOD

The clerical predictor tests were administered to 460 students (five consecutive classes) enrolled in Clerk General Course MOS 70A10 at Fort Jackson, South Carolina. This is an entry-level course requiring no prior Army training other than Basic Combat training. The tests were administered just prior to the beginning of the clerical training course.

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In order that the data reflect the full range of ability, criterion part scores and final course grades were obtained for all students entering the course whether they passed, failed, were dropped for academic or other reasons, or were recycled. Order of testing was as follows:

1. CS, Coding Speed
2. ACS Part I, Number Reversal
3. ACS Part II, Coding

## RESULTS

CS was found to be more valid for predicting the MOS 70A10 final course grade criterion and the criterion part scores than were either ACS total score or the Part I or Part II scores (Table 2). The validity coefficient for CS was .45, compared to ACS total score .35, ACS Part II .37, and ACS Part I .22. CS was also consistently the better predictor of the criterion part scores. The average validity of CS across part scores and final course grade was .31 compared to .27 for ACS Part II and .21 for ACS total score (Table 2).

The samples had an AFQT mean of 50.1 and a standard deviation of 21.7; the mean was almost identical to the population mean of 50, and the standard deviation was smaller than the population standard deviation, which is 28.9. The sample seemed to be representative of the input to clerical courses.

In considering CS as a possible substitute for ACS in the AQB, the higher absolute validity of CS in predicting a clerical course criterion has been noted. It was necessary to determine the unique validity of the two tests. Since GT also has high validity for clerical courses, it was selected as the basis for estimating the uniqueness of the various clerical speed scores. Both CS and ACS II had about the same order of correlation with GT ( $r = .31$  and  $.29$  respectively; shown in Table 3). However, the correlation between ACS total and GT was only  $.21$  because of the low correlation between ACS I and GT ( $.08$ ). Correlation between ACS II and CS, which was designed to be equivalent to it, was  $r = .72$ . In Table 3, some of the whole-part correlation between ACS and CL are also shown.

Table 1

COMPARISON OF CS AND ACS PRACTICE QUESTIONS  
AND TEST QUESTIONS

TEST

PRACTICE QUESTIONS

TEST QUESTION

ACS I

R

W

6953

3596

R

W

980

809

Same as practice questions.

ACS II

KEY:

auto.....2715

bread.....1413

house.....3451

train.....2864

1. train

1413

2715

2864

3451

Ten-item key; ten alternatives for each question. Response marks horizontal.

CS

Key

auto. ....2715

bread. ....1413

house. ....3451

train. ....2864

Question

Answers

A

B

C

D

1. train

1413

2715

2864

3451

The test questions are in the test booklet. The responses are made on the same answer sheet as the practice questions. There is a ten-item key, and five alternatives for each question.

The key and items for the practice questions are in the test booklet. The responses are made on a separate answer sheet. (See below.)

PART 1

CODING SPEED

PRACTICE QUESTIONS

1

2

3

4

5

The key and items for the practice questions are in the test booklet. The responses are made on a separate answer sheet. (See below.)

PART 1

CODING SPEED

PRACTICE QUESTIONS

A B C D	A B C D	A B C D	A B C D	A B C D
1	2	3	4	5

Table 2

COMPARISON OF CS AND ACS IN PREDICTING  
CLERK TYPIST TRAINING CRITERIA

Criterion	Test			
	CS	ACS I	ACS II	ACS Total
1st wk typing	.26	.07	.27	.19
2d wk typing	.26	.00	.24	.14
2d wk total	.28	.19	.30	.29
3d wk typing	.26	.00	.25	.14
3d wk total	.39	.12	.28	.23
4th wk typing	.28	.02	.25	.15
4th wk total	.24	.12	.19	.18
Final Course Total	.45	.22	.37	.35

Table 3

CORRELATIONS OF TWO CLERICAL TESTS AND CL AND GT  
APTITUDE AREAS

	CL	GT
CL		.74
GT	.74	
CS	.43	.31
ACS I	.23	.08
ACS II	.50	.29
ACS TOTAL	.42	.21

#### CONCLUSIONS

The Coding Speed Test (CS) has been found to be more valid than the Army Clerical Speed Test (ACS) of the Army Classification Battery in predicting a clerical training criterion. The CS is easier to administer and score than ACS. CS is, therefore, a logical and appropriate substitute for ACS in the AQB.